

1 COOLEY GODWARD KRONISH, LLP
THOMAS J. FRIEL, JR. (80065)
2 tfriel@cooley.com
JEFFREY S. KARR (186372)
3 jkarr@cooley.com
3000 El Camino Real
4 Five Palo Alto Square
Palo Alto, CA 94306
5 Telephone: (650) 843-5000
Facsimile: (650) 857-0663
6

COOLEY GODWARD KRONISH, LLP
7 WAYNE O. STACY (pro hac vice)
wstacy@cooley.com
8 ORION ARMON (pro hac vice)
oarmon@cooley.com
9 380 Interlocken Crescent, Suite 900
Broomfield, CO 80021-8023
10 Telephone: (720) 566-4000
Facsimile: (720) 566-4099
11

Attorneys for Plaintiff
12 BOOKHAM, INC., a Delaware Corporation

13 UNITED STATES DISTRICT COURT
14 NORTHERN DISTRICT OF CALIFORNIA
15 SAN JOSE DIVISION
16

17 BOOKHAM, INC., a Delaware Corporation,
18 Plaintiff,
19

20 v.

21 JDS UNIPHASE CORPORATION,
a Delaware Corporation;
22 AGILITY COMMUNICATIONS, INC.,
a Delaware Corporation; and DOES 1-10,
23 Defendants.
24

Case No. 5:08-CV-01275-RMW

**BOOKHAM, INC.'S ANSWER TO JDS
UNIPHASE CORP. AND AGILITY
COMMUNICATIONS, INC.'S
COUNTERCLAIMS**

25 For its answer to JDS Uniphase Corp. and Agility Communications, Inc.'s July 21, 2008
26 Answer and Counterclaims, Bookham, Inc., by and through counsel, admits, denies, and avers as
27 follows:
28

PARTIES

1. In response to the averments in Paragraph 1, Bookham admits that JDSU is a corporation duly incorporated and existing under the laws of the State of Delaware, with its principal place of business in Milpitas, California.

2. In response to the averments in Paragraph 2, Bookham admits that it is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in San Jose, California.

JURISDICTION AND VENUE

3. Bookham admits the averments in Paragraph 3.

4. In response to Paragraph 4, Bookham admits that venue as to itself is proper and that Bookham, by virtue of having brought suit against JDSU and Agility, has submitted itself to the jurisdiction of this Court.

COUNTERCLAIM FOR PATENT INFRINGEMENT

5. In response to the averments in Paragraph 5, Bookham admits that on its face, U.S. Patent No. 6,658,035 states that it was issued on December 2, 2003 by the United States Patent and Trademark Office. Bookham lacks sufficient knowledge or information to form a belief regarding the truth of the other averments contained in Paragraph 5, and on that basis denies each and every such averment.

6. In response to the averments in Paragraph 6, Bookham admits that on its face, U.S. Patent No. 6,654,400 states that it was issued on November 25, 2003 by the United States Patent and Trademark Office. Bookham lacks sufficient knowledge or information to form a belief regarding the truth of the other averments contained in Paragraph 6, and on that basis denies each and every such averment.

7. In response to the averments in Paragraph 7, Bookham admits that on its face, U.S. Patent No. 6,687,278 states that it was issued on February 3, 2004 by the United States Patent and Trademark Office. Bookham lacks sufficient knowledge or information regarding the truth of the other averments contained in Paragraph 7, and on that basis denies each and every such averment.

8. Bookham lacks sufficient knowledge or information to form a belief regarding the

1 truth of the averments in Paragraph 8, and on that basis denies each and every such averment.

2 9. Bookham lacks sufficient knowledge or information to form a belief regarding the
3 truth of the averments in Paragraph 9, and on that basis denies each and every such averment.

4 10. The averments in Paragraph 10 characterize the '035, '400, and '278 Patents. The
5 patents-in-suit speak for themselves. Therefore, the averments in Paragraph 10 require no
6 response by Bookham. To the extent that Paragraph 10 may be deemed to allege any facts or any
7 factual or legal entitlements to the relief requested, Bookham denies each and every such
8 allegation.

9 11. In response to the averments of Paragraph 11, Bookham admits that it
10 manufactures tunable lasers with integrated optical amplifiers for sale and use in the United States
11 and offers for sale and sells tunable lasers with integrated optical amplifiers in the United States.

12 12. Bookham denies each and every averment in Paragraph 12.

13 a. Bookham denies each and every averment in Paragraph 12(a).

14 b. Bookham denies each and every averment in Paragraph 12(b).

15 c. Bookham denies each and every averment in Paragraph 12(c).

16 d. Bookham denies each and every averment in Paragraph 12(d).

17 e. Bookham denies each and every averment in Paragraph 12(e).

18 13. Bookham denies each and every averment in Paragraph 13.

19 14. Bookham denies each and every averment in Paragraph 14.

20 15. Bookham denies each and every averment in Paragraph 15.

21 16. Bookham denies each and every averment in Paragraph 16.

22 **PRAYERS FOR RELIEF**

23 17. Paragraph 17 constitutes Prayers for Relief which do not require a response. To
24 the extent that this section may be deemed to allege any facts or any factual or legal entitlements
25 to the relief requested, Bookham denies each and every such allegation. Specifically, Bookham
26 denies that JDSU or Agility are entitled to any of the requested relief. Bookham joins in the
27 request for a jury trial.

AFFIRMATIVE DEFENSES

For its affirmative defenses, Bookham states as follows:

First Affirmative Defense (Failure to State a Claim)

1. JDSU and Agility's Counterclaims should be dismissed for failure to state a claim for which relief may be granted.

Second Affirmative Defense (Non-infringement)

2. Bookham has not infringed and is not now infringing, directly, contributorily or through inducement, any valid claims of the '035, '400, or '278 Patents.

Third Affirmative Defense (Invalidity)

3. The '035, '400, or '278 Patents are invalid for failure to satisfy one or more of the conditions of patentability set forth in Title 35 of the United States Code, including, but not limited to, 35 U.S.C. §§ 101, 102, 103, 112, and 116.

Fourth Affirmative Defense (Unclean Hands)

4. JDSU and Agility's claims for relief are barred, in whole or in-part, by the equitable doctrines of unclean hands.

Fifth Affirmative Defense (Prosecution History Estoppel)

5. By reason of admissions made during the prosecution of the '035, '400, or '278 Patents, JDSU and Agility are estopped from construing any claim of the patents-in-suit to cover any Bookham product, process, or method.

Sixth Affirmative Defense (Inequitable Conduct)

6. Title 37 of the Code of Federal Regulations Section 1.56 and the Manual for Patent Examination and Procedure Section 2000.01 *et seq.* impose a duty of candor and good faith on each individual associated with the filing and prosecution of a patent application before the United States Patent and Trademark Office. This duty requires applicants and their prosecuting agents or attorneys to disclose to the USPTO all information that is material to the patentability of the application being examined. Failing to disclose material information, or making materially false misrepresentations, with deceptive intent to the USPTO constitutes inequitable conduct and renders the affected patents unenforceable.

1 7. As set forth with more particularity below, Bookham is informed and believes, and
2 based thereon alleges, that Agility and the named inventors of the '035, '400, or '278 Patents
3 and/or their attorneys, employees and agents, with intent to deceive, failed to disclose material
4 information to the USPTO during the prosecution of the applications which led to the '035, '400,
5 or '278 Patents that result in the patents-in-suit and related patents in the same family being
6 invalid, void and/or unenforceable.

7 8. The '035, '400, and '278 Patents are unenforceable due to inequitable conduct
8 based on the facts and circumstances of which are set forth below:

- 9 a. Thomas Beck Mason, Gregory A. Fish, and Larry A. Coldren are named as
10 inventors on the '035, '400, and '278 patents.
- 11 b. On August 6, 1998, Thomas Beck Mason, Gregory A. Fish, Steven P.
12 DenBaars, and Larry A. Coldren jointly published an article titled "Ridge
13 Waveguide Sampled Grating DBR Lasers with 22-nm Quasi-Continuous
14 Tuning Range" in Volume 10, Issue No. 9 of the journal Photonics Technology
15 Letters (hereafter the "Mason Publication").
- 16 c. The Mason Publication discloses optimized waveguide structures and
17 improved regrowth techniques that enabled the authors to extend the tuning
18 range of conventional ridge waveguide DBR laser diodes to greater than 6 nm
19 and, in SGDBR configuration, to greater than 22 nm.
- 20 d. According to the Mason Publication, these tuning ranges were the "largest ever
21 reported for a ridge waveguide structure."
- 22 e. The broadly tunable laser disclosed in the Mason Publication is depicted in
23 Figure 1B of the '035, '400, and '278 patents.
- 24 f. Multiple claims in each of the '035, '400, and '278 patents recite as a claim
25 element the broadly tunable laser disclosed in the Mason Publication.
- 26 g. On information and belief, Steven P. DenBaars is a co-inventor of the broadly
27 tunable laser assembly that is disclosed in the Mason Publication and recited as
28 an element in the claims of the '035, '400, and '278 patents.

- 1 h. On information and belief, Mason, Fish, and/or Coldren knew at the time they
2 filed the applications that matured into the '035, '400, and '278 patents that
3 Steven P. DenBaars was a co-inventor of the inventions claimed therein, and
4 they knowingly and intentionally failed to list Mr. DenBaars as an inventor
5 with intent to deceive the USPTO.
- 6 i. Additionally, Bookham is informed and believes and, based thereon, alleges
7 that the named inventors of the '035, '400, and '278 patents and/or their
8 attorneys, employees and agents, with intent to deceive, failed to disclose
9 material prior art to the USPTO during the prosecution of the applications
10 which issued as the '035, '400, and '278 patents.
- 11 j. The earliest application date of the '035, '400, and '278 patents is September
12 2, 1999.
- 13 k. The Mason Publication qualifies as a prior art printed publication to the Patents
14 under 35 U.S.C. § 102(b), because it was published in this country more than
15 one year prior to September 2, 1999, the earliest application date for the '035,
16 '400, and '278 patents. The Mason Publication also qualifies as prior art under
17 35 U.S.C. § 102(a).
- 18 l. On information and belief, the authors of the Mason Publication also presented
19 the Mason Publication and distributed copies of the publication at the
20 International Semiconductor Laser Conference '98 in Nara, Japan, and
21 elsewhere.
- 22 m. The information disclosed in the Mason Publication is not cumulative to
23 information made of record during prosecution of the applications that issued
24 as the '035, '400, and '278 patents.
- 25 n. The Mason Publication is material prior art under 37 C.F.R. § 1.56 at least
26 because, when combined with other art, it establishes a prima facie case of
27 unpatentability of one or more claims contained in each of the '035, '400, and
28 '278 patents. Additionally, a reasonable examiner would have considered the

1 information disclosed in the Mason Publication to be important in deciding
2 whether to allow one or more claims in the applications for the '035, '400, and
3 '278 patents to issue.

4 o. The named inventors of the '035, '400, and '278 patents and/or their attorneys,
5 employees and agents knew that the Mason Publication was material prior art
6 to the inventions claimed in the applications that issued as the '035, '400, and
7 '278 patents at the time they filed their patent applications and while those
8 applications were pending before the USPTO.

9 p. On information and belief, despite their knowledge of the Mason Publication
10 and its materiality to the subject matter of the '035, '400, and '278 patents, and
11 despite their duty to disclose material information to the USPTO, the named
12 inventors and/or their attorneys, employees, and agents knowingly and
13 intentionally withheld the Mason Publication from the USPTO, with the intent
14 to deceive the USPTO regarding the patentability of the claims of the '035,
15 '400, and '278 patents. As a result, the '035, '400, and '278 patents are
16 unenforceable for inequitable conduct.

17 q. Finally, each of the named inventors, including Larry A. Coldren in particular,
18 is a prolific author in the same field of endeavor as the '035, '400, and '278
19 Patents. The named inventors authored or co-authored other prior art
20 publications that were relevant to the patentability of the Patents that also were
21 not disclosed to the USPTO during prosecution of the Patents, including, but
22 not limited to, *Diode Lasers and Photonic Integrated Circuits*, by Larry A.
23 Coldren and Scott W. Corzine, published by John Wiley & Sons, Inc. in 1995;
24 and *Integration of Semiconductor Laser Amplifiers With Sampled Grating*
25 *Tunable Lasers For WDM Applications*, by San-Liang Lee, Mark E.
26 Heimbuch, Daniel A. Cohen, Larry A. Coldren, and Steven P. DenBaars,
27 published in IEEE Journal of Selected Topics in Quantum Electronics, Vol. 3,
28 No. 2, April 1997. On information and belief, these and other prior art

1 publications authored by the inventors are material to the patentability of the
2 patents-in-suit, and were withheld by the inventors with intent to deceive the
3 USPTO regarding the patentability of the claims in the patents-in-suit.

4 9. The foregoing breaches of the applicants' duty of candor and good faith in the prosecution
5 of the patents-in-suit bar the enforcement of all patents in the same family that claim priority to
6 the patents-in-suit, and specifically, bar enforcement of the '035, '400, and '278 Patents, against
7 Bookham or any other party.

8 **Seventh Affirmative Defense (Adequate Remedy at Law)**

9 10. JDSU and Agility's equitable claims are barred because they have not suffered irreparable
10 harm and because they have an adequate remedy at law.

11 **Eighth Affirmative Defense (Damages Speculative)**

12 11. Some or all of JDSU and Agility's alleged damages are speculative, uncertain and not
13 recoverable.

14 **Ninth Affirmative Defense (Lack of Standing)**

15 12. JDSU and Agility lack standing to assert their Counterclaims.

16 **Tenth Affirmative Defense (Failure to Mark)**

17 13. JDSU and Agility's damages, if any, are limited because JDSU and/or Agility failed to
18 mark their products in accordance with 35 U.S.C. § 287.

19 **Eleventh Affirmative Defense (Notice)**

20 14. JDSU and Agility are prohibited from recovering damages for activities alleged to have
21 occurred before they provided actual notice of the asserted patents and the specific activities
22 alleged to infringe.

23 **Twelfth Affirmative Defense (Laches and Estoppel)**

24 15. JDSU and Agility's claims are barred by the equitable doctrines of laches and estoppel.

25 **Thirteenth Affirmative Defense (Failure To Join An Indispensable Party)**

26 16. JDSU and Agility's claims must be dismissed for failure to join one or more indispensable
27 parties.

28

PRAYER FOR RELIEF

WHEREFORE, Bookham prays for judgment as follows:

1. That the Court dismiss JDSU and Agility's Counterclaims for lack of standing;
2. That JDSU and Agility take nothing by their Counterclaims, and that the same be dismissed with prejudice;
3. That the Court find that JDSU and Agility are not entitled to any of their requested relief, or any relief whatsoever;
4. That the Court find that Bookham has not infringed, contributed to the infringement of, or induced the infringement of any valid claims of U.S. Patent Nos. 6,658,035, 6,654,400, or 6,687,278, directly or indirectly;
5. For a declaration that U.S. Patent Nos. 6,658,035, 6,654,400, and 6,687,278 are invalid;
6. For a declaration that U.S. Patent Nos. 6,658,035, 6,654,400, and 6,687,278 are unenforceable;
7. For a declaration that, according to the doctrine of infectious unenforceability, the claims of each patent and patent application that is related to, or that claims priority from, U.S. Patent Nos. 6,658,035, 6,654,400, and 6,687,278 is unenforceable;
8. For Bookham's reasonable attorneys' fees and costs of suit incurred herein pursuant to 35 U.S.C. § 285; and
9. That Bookham be awarded all other and further relief as the Court deems just and proper in this case.

Dated: _August 8, 2008

COOLEY GODWARD KRONISH LLP

/s/ Wayne O. Stacy

Wayne O. Stacy
Attorneys for Plaintiff
BOOKHAM, INC., a Delaware Corporation

JURY DEMAND

Bookham respectfully requests a jury trial on all issues triable thereby.

Dated: August 8, 2008

COOLEY GODWARD KRONISH LLP

By: /s/ Wayne O. Stacy
Wayne O. Stacy
Attorneys for Plaintiff
Bookham, Inc.

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